

### ABSTRACT OF THE INVENTION

The invention relates to an in vitro method for detecting the formation of endothelins during serious illnesses, especially cardiovascular diseases, inflammations, sepsis and cancer, in whole blood, plasma or serum of a human patient for medical diagnosis. Using this method, relatively long-lasting peptide fragments, especially a C-terminal peptide fragment, of the processed primary prepro- or proendothelins that contain neither the actual biologically active endothelin nor its direct precursor, big endothelin, can be detected.